

## PERPETUAL& back2back

### 1. Recycled content

a. 72.1% overall recycled content

b. Yarn

100% ECONYL® yarn - 100% Regenerated Nylon

ECONYL® is manufactured using post-industrial and post-consumer Polyamide 6 waste, making it 100% sustainable.

c. Backing – back2back

Standard carpet tile backing with a minimum of 75% post-industrial recycled content.

The back2back backing is our bitumen-based backing with up to 10% of our own cutting waste processed in combination with 75% recycled raw materials, i.e. limestone or CaCO<sub>3</sub> as a filler in the bitumen layer.

### 2. Manufacturing

a. Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

#### ISO certification

Our production site is ISO-9001 certified (Quality Management) since 2000 and ISO-14001 certified (Environmental Management) since 2009.

modulyss uses the UN's Sustainable Development Goals (SDGs) as its guideline for sustainable reporting. With our products and collaborations we have a positive impact on the following SDGs:

#### Products & operations



#### Collaborations & value chain



#### Recycling raw yarns

All the left over and waste yarns are collected and recycled into new yarns.

#### Ecological Packaging

We only use cardboard boxes that are made of 100% recycled material.

c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016:

<https://online.flippingbook.com/view/657858216/>

### 3. Installation

#### a. Adhesive

modulyss advises to use a solvent-free, easy release system with very low emissions.

#### b. Flex Fitters

Flex Fitters are self-adhesive tabs that allow a glue-free installation, with a negligible amount of VOCs.

This results in a better indoor air quality, and a higher recyclability of both the tabs and the carpet tiles.

#### c. Installation waste

If you install carpet tiles in a rectangular building, before the walls are placed, the waste is 3-4%. In comparison, for broadloom carpet the amount of waste increases to  $\pm 50\%$ . More information can be found in our installation instructions.

### 4. 15 year warranty

We guarantee for a period of 15 years that our carpet tiles are free of faults of production and/or premature wear.

### 5. End of Life

#### a. Re-use

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas to extend the product life.

#### b. Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back programme.

#### c. CARE

Partnership modulyss/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in  $\pm 50\%$  recycling of our carpet tiles.

### 6. VOCs & chemical substances

This product fulfills the testing criteria for emissions of:

#### a. CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 6.b)

#### b. GUT (DE)

Gemeinschaft Umwelfreundlicher Teppichboden

TVOC<sub>28</sub> < 100 µg/m<sup>3</sup>

This product meets the GUT-criteria, GUT-license number is F2EE2716. These criteria include VOC thresholds, odour and chemical substances.

#### c. REACH (EU)

modulyss complies with the strict European REACH standards.

#### d. M1 (FI)

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

## 7. Environmental Product Declaration (EPD)

An EPD is a standardized way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product.

The EPD-declaration-number is EPD-MOD-20170095-CBC1-EN.

## 8. FDES (FR)

Fiche de Déclaration Environnementales et Sanitaires. This declaration gives an overview of the environmental and health characteristics of a construction product for all phases of its life cycle. (Production, transport, implementation, useful life and end of life.)

## 9. Compliance to Green Building Certifications

### a. BREEAM (UK)

Building Research Establishment

This product can contribute towards credits in:

HEA 02:	Indoor air quality
HEA 05:	Acoustic performance
MAT 01:	Life cycle impact
MAT 02:	Environmental product declarations
MAT 03:	Responsible sourcing of materials
MAT 05:	Designing for robustness / durability and resilience
WST 01:	Construction waste management
WST 04:	Speculative floor and ceiling finishes
WST 06:	Design for disassembly and adaptability

### b. LEED (US and international)

Leadership in Energy and Environmental Design

This product can contribute to the following LEED v4 credits:

SS credit:	Tenant design and construction guidelines
MR credit:	Interiors life-cycle impact reduction
MR credit:	Building product disclosure and optimization - Environmental Product Declarations
MR credit:	Building product disclosure and optimization - sourcing of raw materials
	Post-Industrial recycled content: 64%
	Post-consumer recycled content: 8%
MR credit:	Building products disclosure and optimisation - material Ingredients
MR credit:	Construction and demolition waste management
EQ credit:	Low emitting materials
EQ credit:	Indoor air quality assessment
EQ credit:	Acoustic performance

Products are not reviewed under LEED, LEED credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED, visit [www.usgbc.org/contact](http://www.usgbc.org/contact)

**c. HQE (FR)**

Haute Qualité Environnementale

In 2005 modulyss was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to seven of the 13 HQE targets.

**d. WELL contribution**

WELL v2 focuses on people and prioritises the health and wellbeing of the end-user in a building. modulyss products can contribute towards credits in indoor air quality, acoustics, toxic materials, biophilic design, optimal lighting design, ...

- |   |  |
|---|--|
| ■ A01 Air Quality                       | ■ X05 Enhanced Material Restrictions                       |
| ■ A02 Pollution Infiltration Management | ■ X06 VOC Restrictions                                     |
| ■ L03 Circadian Lighting Design         | ■ X07 Materials Transparency (products on ecoBack only)    |
| ■ S04 Reverberation Time                | ■ X08 Materials Optimization (C2C Certified products only) |
| ■ X01 Material Restrictions             | ■ M07 Restorative Spaces                                   |

**e. Good Environmental Choice Australia (GECA) (AU)**

Australia's only independent, not-for-profit, multi-sector ecolabelling programme. Certification programme that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations.

**10. Health & Comfort****a. Solvent-free backing**

For the backing we only use bitumen that is not oxidized and is solvent-free.

**b. No heavy metals**

modulyss carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

**c. Odour**

modulyss carpet tiles are free from odours (see GUT certification programme)

**d. Acoustics**

This product is strongly sound absorbent. It reduces the contact noise by 27 decibels ( $\Delta L_w$  - ISO10140), with a perfect acoustic effect as result.

**11. Partnerships****11.1 Member of Healthy Seas®**

As part of our sustainable mission to reduce the Life Cycle Impact of each product, modulyss decided to join Healthy Seas® as an associate partner member. Healthy Seas® was set up to protect our seas by diving for abandoned fishing nets that catch or injure marine life. Healthy Seas® makes sure that the fishing nets get recycled and regenerated into ECONYL® yarn by Aquafil, Europe's premier manufacturer of PA 6 carpet fibre.

**11.2 CO<sub>2</sub>RE**

At modulyss we've been working to reduce our carbon footprint since 2008, taking huge steps in making our products and production process less impactful on the planet. But when producing carpet tiles, there is an unavoidable small footprint left behind. That's why we created CO<sub>2</sub>RE, our CO<sub>2</sub> reduction initiative through offset.

We've partnered with CO<sub>2</sub>logic, to make sure CO<sub>2</sub>RE delivers a long-term sustainable model for our offsetting.

We currently sponsor a climate project that is in line with the PAS2060, an international standard which regulates the CO<sub>2</sub> offset-requirements.

CO<sub>2</sub>RE comes as a standard on the Handcraft collection (Moss, Leaf, Willow & Grind) and on all Cradle to Cradle Certified® Silver or Gold products. In addition, CO<sub>2</sub>RE is available on request on all other modulyss carpet tile collections.

